FORM PTO-1390 (REV. 11-2000) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY 'S DOCKET NUMBER: 11004/005

U.S. APPLICATION NO. (If known, see 37 CFR 1.5): 09/831613

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/EP00/10145	10/02/2000	11/11/1999

TITLE OF INVENTION: APPARATUS AND METHOD FOR ACQUIRING BIOLOGICAL INFORMATION AND FOR CONTROLLING BIOLOGICAL SYSTEMS

APPLICANT(S) FOR DO/EO/US: Dietrich Reichwein & Olaf Peters

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. [ ] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. [X] This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. [ ] The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. [X] is attached hereto (required only if not communicated by the International Bureau).
   b. [ ] has been communicated by the International Bureau.
   c. [ ] is not required, as the application was filed in the United States Receiving Office (RO/US).
6. [X] An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. [X] is attached hereto.
   b. [ ] has been previously submitted under 35 U.S.C. 154(d)(4).
7. [X] Amendments to the claims of the International Aplication under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. [ ] are attached hereto (required only if not communicated by the International Bureau).
   b. [ ] have been communicated by the International Bureau.
   c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.
   d. [X] have not been made and will not be made.
8. [ ] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. [X] An oath or declaration of the *inventor*(s) (35 U.S.C. 371(c)(4)). (facsimile copy)
10. [ ] An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. [ ] An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. [ ] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. [ ] A FIRST preliminary amendment.
14. [ ] A SECOND or SUBSEQUENT preliminary amendment.
15. [ ] A substitute specification.
16. [ ] A change of power of attorney and/or address letter.
17. [ ] A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. [ ] A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. [ ] A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. [X] Other items or information:

FORM PCT/RO/101; PCT FILING RECEIPT; FORM PCT/IB/304; FORM PCT/IB/301; INFORMAL DRAWINGS (8 SHEETS)

U.S. APPLICATION NO (if known, see 37 CFR 1.5) 09/831613	INTERNATIONAL APPLICATION NO PCT/EP00/10145	ATTORNEY'S DOCKET NUMBER 11004/005

21. ☒ The following fees are submitted:

	CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):		
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO **$1000.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO **$860.00**		
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO **$710.00**		
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) **$690.00**		
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) **$100.00**		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 1000.00	
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$ 0.00	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	$	
Total claims	40 - 20 =	20	x **$18.00**	$ 360.00	
Independent claims	5 - 3 =	2	x **$80.00**	$ 160.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) YES			+ **$270.00**	$ 270.00	
TOTAL OF ABOVE CALCULATIONS =				$ 1790.00	
☒ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.			+	$-895.00	
SUBTOTAL =				$ 895.00	
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				$ 0.00	
TOTAL NATIONAL FEE =				$ 895.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +				$ 0.00	
TOTAL FEES ENCLOSED =				$ 895.00	
				Amount to be refunded:	$
				charged:	$

a. ☒ A check in the amount of $ 895.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-1925 . A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

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26,983
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Apparatus and Method for Capturing Biological Information and Controlling Biological Systems

The presented invention concerns an apparatus and a method for capturing biological information and an apparatus and a method for controlling biological systems which can be used, for example, for the intervention in biological processes, for the elimination of damaging cell conditions, for the reduplication of cells and organisms, and for the manipulation of the genetic material of an organism.

The method of influencing biological events through electromagnetic devices is a widely known technological procedure. General examples that can be listed are biophoton spectral analysis, biological resonance techniques, and the application of magnetic fields for faster germination or for speeding up vital processes. All these applications have in common that their controlling sequences rely on empirical data and that a biological response is to be triggered through field effects.

In 1895, Nikola TESLA reported extensively about the first technological application of this method for the transmission of information over large distances in an open circuit with a single conductor—without return wire as well as through a wireless system. Subsequently, however, Hertz waves prevailed as the preferred method for data transfer while longitudinal waves were largely neglected until biological distortions were observed which were caused by technical waves. One of the key reasons for this course of events was the fact that lateral waves (transversal waves) could be completely described with the Maxwell equation whereas the technological means to fully measure potential vortices (longitudinal waves) had been lacking so far. Instead of capturing the potential vortex directly, its effects were measured and evaluated. Such effects can be vortex losses or effects on the stimulating field. However, such measurements are only possible if the effect really occurs.

The task of the presented invention is to offer apparatuses and methods for capturing biological information and for controlling biological systems as well as applications for such apparatuses.

This task is accomplished by the apparatuses according to claim 1 and claim 14, by the methods according to claim 29 and claim 37, and by the

applications according to claim 40. Further advantageous expansions of the apparatuses and methods of the invention are described in the additional dependent claims.

The presented invention is based on the discovery that cellular controlling impulses in the form of potential vortices, i.e., longitudinal waves, perform data transfer tasks not only within the cell unit, but also inside single cells. A prerequisite for data transfer on the cell level is that the vortex truly breaks down after a relaxation time to give way to the next data-transferring potential vortex.

As a dielectric vortex, the potential vortex will encounter conditions inside the cell fluid which are determined by its magnetic and electrical permeability.

As the breakdown of the vortex at the receptor with subsequent replacement by a vortex containing expanded data and the linkage to the triggering lateral field are fundamental prerequisites, the following section will describe the mathematical principles underlying the physical nature of the invention:

1. Flow-Through Law: $\nabla \times H = j + \frac{\partial D}{\partial t}$

With Ohm's Law: $j = \sigma * E$

Dielectric Shift: $D = \varepsilon * E$

Relaxation Time $\tau_1 = \frac{\varepsilon}{\sigma}$

Equation 1: $\nabla \times H = \varepsilon \left(\frac{E}{\tau_1} + \frac{\partial E}{\partial t} \right)$

2. Law of Induction (expanded with duality rules): $-\nabla \times E = \frac{B}{\tau_2} + \frac{\partial B}{\partial t}$

With Induction: $B = \mu H$

Equation 2: $$-\nabla \times E = \mu\left(\frac{H}{\tau_2} + \frac{\partial H}{\partial t}\right)$$

$$-\nabla \times (\nabla \times E) = \mu\left(\frac{1}{\tau_2}\right) * \nabla \times H + \frac{\mu\partial(\nabla \times H)}{\partial t}$$

Insertion of Equation 1:

$$-\nabla \times (\nabla \times E) = \mu * \varepsilon\left[\frac{E}{\tau_1\tau_2} + \left(\frac{1}{\tau_2}\right)\frac{\partial E}{\partial t} + \left(\frac{1}{\tau_1}\right) * \frac{\partial E}{\partial t} + \frac{\partial^2 E}{\partial t^2}\right]$$

$$-\nabla \times (\nabla \times E) = \Delta \bullet E - \nabla(\nabla \bullet E) = \Delta E$$

because, $\Delta \bullet E = 0$

Abbreviation: $\mu\varepsilon = 1/c^2$

3. Fundamental Field Equation:

$$(\Delta \bullet E) * c^2 = \frac{\partial^2 E}{\partial t^2} + \left(\frac{1}{\tau_1}\right) * \frac{\partial E}{\partial t} + \left(\frac{1}{\tau_2}\right) * \frac{\partial E}{\partial t} + \frac{E}{\tau_1\tau_2}$$

References: Prof. Dr. Konstantin Meyl: Elektromagnetische Unverträglichkeit, Ursachen, Phänomene und naturwissenschaftliche Konsequenzen. Umdruck zur Vorlesung [Electromagnetic Incompatibility, Causes, Phenomenona and Scientific Consequences, Reprint for the Lecture], ISBN 3-9802-542-9-1 and ISBN 3-9802-642-8-3. Potentialwirbel [Potential Vortex], Vol. 1 and 2, by Prof. Dr. Konstantin Meyl, ISBN 3-9802-542-1-6 and ISBN 3-9802-542-2-4.

According to the flow-through law, the current density inside the cell volume is uniform and is identical to the vortex density of the magnetic field strength.

Therefore: $\nabla \times H = j + \frac{\partial D}{\partial t}$

Ohm's Law: $j = \sigma * E$

Dielectric Shift: $D = \varepsilon * E$

Relaxation Time: $\tau_1 = \varepsilon/\sigma$

The relaxation time indicates how fast the current vortices will break down. Up to this point, known relationships are applicable (Potential Vortex, Vol. 1 and 2, Prof. Dr. Konstantin Meyl, see above).

The result is as follows: $$H = \varepsilon\left(\frac{E}{\tau_1} + \frac{\partial E}{\partial t}\right)$$

The new electrical field vortices require the introduction of an appropriate time constant τ_2 to describe the breakdown of the potential vortices. The expanded law of induction describes a potential density which everywhere inside the cell space is equivalent to the electrical field strength.

$$-\nabla \times E = \frac{B}{\tau_2} + \frac{\partial B}{\partial t}$$

The result meets the duality requirement with regards to equation 1:

$$-\nabla \times E = \mu\left(\frac{H}{\tau_2} + \frac{\partial H}{\partial t}\right)$$

A further simplification is possible according to the rules of vector analysis:

$$\nabla \times (\nabla \times E) = \Delta \cdot E - \nabla(\nabla \cdot E)$$

where, notably, the divergence disappears when the equivalent field vortex is formed.

The above derivation explains the cell behavior of living cells. The potential vortex is caused by the lateral wave field whereby a strong linkage exists between both components—lateral wave field and longitudinal wave field—during the relaxation time. The formation and the breakdown of the potential vortices cause electrical fields of significant magnitude equivalent to

n V/m (cell membrane potential)

at a cell membrane.

This interaction between electrical and magnetic field sizes is an indicator of life in animated material structures. Due to the linkages derived above, the effects of potential vortices can be measured as electromagnetic waves.

Consequently, the effect of the Cellular Electromagnetic Control System (CECS) or (ZES, Zelluläre Elektromagnetische Systemsteuerung) during the formation of potential vortices and their transfer at the receptor with concurrent data absorption can be registered through measuring techniques, decoded through computer-based signal analysis and, in accordance with the presented invention, applied to cells by means of technical rebound systems.

A cause survey of the events during the Cellular Electromagnetic Control System identified a functional course which is based on the proton oscillation of the protein molecule. Only aminoacids in the form of protein molecule chains, i.e., joined together in cells, are capable of providing signal emissions required for animation. Proton oscillations of the protein molecules are a prerequisite for the formation of material structures capable of animation.

In Fig. 1, a protein molecule 1, schematically referenced only as charge carriers, is displayed as a chain molecule in which a proton, in an alternating pattern, is not compensated through an adequate number of electrons $n*e^-$ at one end of each chain of aminoacids 2.

Accordingly, the electrons $n*e^-$ will wander from proton "A" at the beginning of the aminoacid chain to proton "E" at the end of the aminoacid chain molecule.

With regards to the formation of potential vortices, consideration needs to be given to the fact that an electrical charge creates a magnetic field orthogonal to the spatial direction in which it is moved.

This applies to the protein molecule 1 with regards to the charge fluctuation from n^*e^-. The resulting ultra-weak electromagnetic fields—in as much as they are caused by the charge fluctuation n^*e^-—are subject to Maxwell's equations. In addition, one proton in alternating sequence will remain uncompensated at each respective end of the mentioned chain molecule and will appear as proton oscillation. This oscillation is of virtual character because the position of the charge in the field will not be changed. The false impression of a measurable oscillation with (seemingly) completed position switch from "A" to "E" is caused by the fluctuating of the compensated charge n^*e^- to the uncompensated charge n^*e^+ which occurs alternatingly in different positions. Through a slight over-extension of the actual movement of the charges n^*e^-, the rhythmic charge change releases a potential vortex in a ring pattern. This potential vortex assumes the data transfer function in the sequence vortex formation -> vortex path -> data transfer at the receptor with vortex breakdown -> vortex reformation at the receptor with data expansion of the receptor data field through data acquired from the vortex which was absorbed and then collapsed at the receptor. The vortex package with variable vortex densities represents the data contents and the data identification, respectively. This formation of the vortex packages amounts to a stimulus-response sequence and is an indication of life in the immediate surroundings (stimulus). The response that penetrates the surroundings can be observed, within the area affected by the cell, as an indication of a metabolism event. In connection with complex aminoacid compounds in form of coded vortex packages, this transition of the potential vortex and the following sequential pattern (as described before) ultimately makes the animation of cell structures possible. Metabolic processes controlled in this way cover the energy requirements of the cells and the ability for procreation with identical reduplication of the cell structure. If the data transfer is disturbed during procreation, the formation of new cells may be characterized by aberrations or mutations. This effect has been extensively observed in fermentation processes (yeast).

It becomes now obvious that the individual frequencies of the protein molecules within a cell and within the cell units should not cause any interferences with each other. A cell unit in which the individual frequencies of the protein molecules emit fields which are consonant and not dissonant with regards to the sum frequency is described as being within the norm of the expected vitality levels. It represents the Cellular Electromagnetic Basic System CEBS or (ZEB, Zelluläres Elektromagnetisches Basissystem) within the Cellular Electromagnetic Control System CECS or (ZES, Zelluläre Elektromagnetische Systemsteuerung). If the individual frequencies become dissonant to each other, the vitality potential decreases proportionally to the increase in dissonance. This amounts to a qualitative and quantitative change of the Cellular Electromagnetic Basic System (CEBS) towards an aberration. If the sum frequency digresses towards zero due to dissonances, the Cellular Electromagnetic Basic System (CEBS) will collapse. This is equivalent to a collapse of all signals of life and indicates the end of any animation.

In active cells the emitting lateral waves ensure the vitality potential of the living unit by matching the individual frequencies to a resulting summary frequency, i.e., consonance.

The potential vortices—mostly emitted by the nucleus and also by the other cell organelles—with the functionally relevant relaxation times τ_1 and τ_2 are the determining factors of the Cellular Electromagnetic Control System. The encoding of the frequency patterns is determined by the quantitative packet density and the qualitative formation of the potential vortex events. This encoding distinguishes the individual cells from each other. The available data content is transferred through vortex induction to the neighboring cell. Thus, vortex packets are formed, on the one hand, through the potential vortex exchange as a result of virtual proton oscillation, and, on the other hand, through induction events of existing vortices which transfer their energy contents (= data contents) during their breakdown to the induced subsequent vortex. Vortex packets formed in this way, which are subject to changes in a stimulus-response sequence with regards to their packet density and formation, represent together the Cellular Electromagnetic Basic System (CEBS) in the cell unit. Applying the principles of the invention, the CEBS, in correlation to the changing lateral wave

field and the associated information contents, can be registered and decoded with the help of a computer (see above mathematical explanation) as a measurable indication of the vitality of cells and cell units. The specific characteristics of a species are thus represented in the cell unit.

Biological and abiological distortions of varying origins as well as noxa of any kind cause modifications in the electrical and magnetic permeability of the cell fluid and thus in the relaxation times, i.e., they cause a premature or protracted aberrant Cellular Electromagnetic Control System (CECS).

With this detailed knowledge of the events it is possible, by means of technical devices, to exert a randomly controlling influence on the Cellular Electromagnetic Control System (CECS) and thereby on the Cellular Electromagnetic Basic System (CEBS), e.g., in order to exclude unwanted mutations during a cloning procedure, and to eliminate the incidental and selection risks during gene manipulations by using technical means to provide information patterns characteristic or significant for the cells (e.g., during the development and manufacturing of seed products). The invention also can be used with great benefit in the pharmaceutical industry for the research and the development of new medications, especially on the basis of histological samples. Time-consuming animal experiments can thus be avoided.

The following section will describe a few examples of applications according to the invention:

The figures show:

Fig. 1 charge oscillation of a protein molecule

Fig. 2 an apparatus for capturing biological information

Fig. 3 another apparatus for capturing biological information

Fig. 4 an apparatus for controlling biological systems

Fig. 5 an AC/DC amplifier as a coil feeder device

Fig. 6 a Klein double coil

Fig. 7 a bifilar Klein coil according to the invention

Fig. 8 the winding schematic of two different bifilar Klein coils

Fig. 1 illustrates schematically the charge oscillation of a protein molecule 1 (protein), as described above. As explained, the electromagnetic emissions consist of two components:

a) the pure lateral wave form caused by the fluctuating negative charges n^*e^-, and

b) the potential vortices in longitudinal wave form which are caused by the alternating exposition of positively charged protons n^*e^+.

Fig. 2 illustrates how the lateral waves generated by a test-tube (displayed twice as test-tube 5a and 5b for purposes of clarity) are captured by a coil-shaped sensor, whereas the potential vortices in longitudinal wave form are captured by a single conductor sensor 6 (preferably made from ferromagnetic material and/or gold-plated). The amplifier circuits 8 and 9 amplify the signals while simultaneously suppressing the background noise. Since the lateral wave field as the stimulator and the longitudinal wave portion as the potential vortex formation are strictly linked during the relaxation period it offers advantages to capture both portions, represent them as measurements, and pass them on to an amplifier through an appropriately combined integrator 10.

Fig. 3 illustrates such an apparatus for capturing biological information in which the longitudinal waves and the transversal waves are measured in a test-tube (shown as 5a and 5b) by a sensor unit 4 (as shown in Fig. 2), then delivered to an integrator 10, and finally amplified in an amplifier 11 and decoded by a computer-based decoder 12. The decoded signals are then delivered with correcting data from a computer-based correcting data input device 16 to another integrator 13 and deposited in a storage unit 14 (e.g., a hard disk) as a corrected signal with defined data content.

Fig. 4 shows an apparatus for controlling biological systems which is equipped with a disk reading unit 17 and is able to read corrected and uncorrected data and transfer the data to an AC/DC amplifier 18. This AC/DC amplifier 18 feeds an application coil 100 which converts the amplified signals in scalar fields (longitudinal waves, potential vortices). These potential waves can now be passed on to cellular systems for the transfer of information. In this way, non-aberrant behavior can be triggered in such systems through data, including corrected data.

Generally, any emitter of technical waves can be used as an application device.

Fig. 5 shows a fully developed circuit diagram of an AC/DC amplifier representing a possible version of a coil feeder device.

Using disk storage devices with integrated repair and control sequences, this apparatus according to the invention is able to reduplicate any desired results. With a data reading unit and a coil feeder device, as shown in Fig. 4, and using a bifilar Klein coil as application coil 100 or using any emitter of technical waves, the data content can be converted into a scalar field. In a pulsating scalar wave (longitudinal wave) field which is applied to another biological sample, e.g., a cell, the intended reduplication, cloning, and gene manipulation events unfold in a manner which is determined by the scalar wave field and its data content. The user of the apparatus may choose to use randomly determined codes within the compatibility range and successive order of the natural cell or DNA material.

The apparatuses according to the invention can eliminate unwanted mutations during cloning procedures and, with the technical provision of cell-characteristic or cell-significant information patterns in the generated scalar wave fields, can largely eliminate the incidental and selection risks during gene manipulations. Similarly, any emitter of technical waves can be imprinted with a cell-specific information wave to influence biological systems, e.g., for repair.

To use the system to its full advantage, it is advisable to produce the scalar longitudinal wave fields with a multiple Klein coil, in particular a bifilar Klein coil.

The Klein winding technique or the Möbius coil (August Ferdinand Möbius, German mathematician and astronomer, Nov. 17, 1790 to Sep. 26, 1868) is well known from technical applications (Sinichi SEIKE in "The Principles of Ultrarelativity", Space Research Institute, Ninomiya Press 1994).

This coil form was developed because the magnetic field of this kind of winding, if generated by AC currents, produces a field which is equivalent to the topology of a Klein bottle (Felix Klein, German mathematician, April 25, 1849 to June 22, 1925). One coil, spooled half on the left and half on the right, functions as a magnetic quasi single pole with a field force distribution in which two equal poles are located at the ends and a counter pole in the middle of the coil. One-sixth of each end field forms closed field lines with one-third of the center pole. One-sixth of the field at each end of the coil shows infinite divergence (div ∞) and

behaves like an electrical field line. This behavior results in an array of phenomena which are equally important to space physics and biology.

This kind of winding is achieved when the individual loops are placed around the coil core in "half strokes".

Such a Möbius coil is shown in Fig. 6 in which a coil 101 has a coil body 102 around which the individual windings of an electrical wire are spooled like in a regular coil. Diverging from regular technical methods, however, the individual windings are spooled around the coil body 102 as "half strokes" resulting in a V-shaped knot line 112.

This kind of spooling does not allow to create a bifilar winding.

The cylindrical coil (multiple Klein coil) which offers advantages for generating scalar longitudinal wave fields contains windings of a first electrical wire and another wire, e.g., as a second electrical conductor. The wires are connected with each other at their respective ends as functionally appropriate. In the case of a bifilar Klein coil containing a first and second wire, the wires are connected electrically with each other at one end of the coil so that each wire can serve for flow in opposite directions. The coil is spooled in such a way that the individual windings of the individual electrical wires are shifted against each other along the circumference of the coil body. If two wires are used it is advantageous to offset them by 180 degrees so that the windings of both electrical wires begin on opposite sides of the coil body.

After approximately one full loop, each of the wires is redirected so that each wire traverses underneath itself and then crosses over the neighboring wire windings along the axis of the coil until it is redirected again to run parallel to the other wire layers around the coil body. Thus, the windings of the first electrical wire and the additional electrical wire alternate along the coil axis. The redirection points (knots) resulting from this kind of arrangement can be placed along the axis of the coil in a straight line or in a zigzag line, e.g., like a series of V's. It offers certain advantages to create a V-shaped knot line in which the direction of the electrical wires changes at each tip of the V, thereby reversing right-looping windings into left-looping windings and vice versa.

In other words, in a coil with two wires with diametrically opposed starting points which is constructed according to the invention each wire is placed in

alternating "half strokes". At the end of the coil the wire ends are connected with each other so that the current in two neighboring windings flows in opposite directions. The magnetic fields will thus cancel each other out. In a vector diagram, the magnetic field vector argument becomes irrelevant, i.e., it is exactly zero since, according to the 2nd Kirchhoff Law, a current is equal in size to its counter current.

Fields in which the arguments of the field vectors are zero are called scalar fields. Their presence in the coil constructed according to the invention is assured since the energy conservation law stipulates that the applied electrical energy cannot disappear (K. Meyl, "Elektromagnetische Unverträglichkeit, Ursachen, Phänomene und naturwissenschaftliche Konsequenzen. Umdruck zur Vorlesung" [Electromagnetic Incompatibility, Causes, Phenomenona and Scientific Consequences, Reprint for the Lecture], ISBN 3-9802-642-8-3 and ISBN 3-9802-542-9-1, and K. Meyl, "Potentialwirbel [Potential Vortex], Vol. 1 and 2, ISBN 3-9802-542-1-6 and ISBN 3-9802-542-2-4).

Fig. 7 shows a coil 100 with a coil body 102 onto which two electrical wires 103 and 104 are spooled. The wires 103 and 104 are wrapped in the same way as described above so that one wire 103 always loops around the core parallel to the other wire 104. The knots of the wire 103 form the V-shaped knot line 110. It should be noted that the solid lines in the figure show the top view as seen by an observer whereas the broken lines depict how the knot line 110 continues on the backside of the coil body 102. This also applies to the knot line 111 of the wire 104 which is shifted by 180 degrees along the circumference of the coil body. The wires 103 and 104 are connected separately at 108 and 109, respectively, and are electrically linked at the reversal loop 107 at the other end of the coil.

Fig. 8 shows each knot formation according to the invention in the partial illustrations A and B. Fig. 8A displays a knot line which runs along the axis of the coil body 102 in a straight line.

The wire 103 is looped around the coil body 102, then pulled through underneath itself and placed again above itself and above the neighboring second wire 104 before it is wrapped around the coil body 102 again in a new loop. The same procedure in a symmetrical pattern is used for the wire 104,

resulting in the knots (redirection points) 105. The redirection points 105 are placed next to each other in a straight line along the axis of the coil body 102. The center of Fig. 8A shows how the wire 103 is placed to form a point of direction change. This means that the wire 103 which was looped to the right up to this point is looped to the left after the reversal point. The knots 105 following after this reversal point 114 are created in the previously described way.

The second wire 104 is represented in Fig. 8 as a broken line. A similar knot line which is not depicted in the illustration is created for this wire on the backside of the coil body 102.

If a linear knot line is created the coil will act as a magnetic dipole under an electrical current.

Fig. 8 also shows how the knots can be placed in a V-shape. Each knot is shifted slightly against the neighboring knot along the circumference of the coil body 102. The center of Fig. 8B illustrates how the typical V-shape is formed by creating a directional reversal point 114. The directional reversal point 114 is at the tip of the V.

If the coil according to the invention is built as shown in Fig. 8B with reversal points 105 in a V-shape, the coil will act as a magnetic tripole under an electrical current.

Patent Claims

1. Apparatus for capturing biological information in cells and organisms and consisting of a sensor for electromagnetic longitudinal waves which creates a data signal for longitudinal waves.

2. Apparatus according to the previous claim whereby the sensor for electromagnetic longitudinal waves is a single conductor connected with a p-n transition.

3. Apparatus according to the previous claim whereby the p-n transition is a diode.

4. Apparatus according to one of the two previous claims whereby the p-n transition is a Zener diode.

5. Apparatus according to one of the claims 2 to 4 whereby the single conductor is made from ferromagnetic material.

6. Apparatus according to one of the claims 2 to 5 whereby the single conductor is gold-plated.

7. Apparatus according to one of the previous claims with a sensor for electromagnetic lateral waves which creates a data signal for lateral waves.

8. Apparatus according to the previous claim whereby the sensor for electromagnetic lateral waves is a coil.

9. Apparatus according to one of the previous claims with an integrator for generating an integrated signal from the data signal for longitudinal waves and/or from the data signal for lateral waves.

10. Apparatus according to one of the previous claims with a decoder for generating a decoded signal from the data signals for longitudinal waves, the data signals for lateral waves, and/or the integrated signals.

11. Apparatus according to the previous claim whereby the decoder contains a microprocessor.

12. Apparatus according to one of the two previous claims with an apparatus for correcting the decoded signal and generating a corrected signal.

13. Apparatus according to one of the previous claims with a recording apparatus for recording the data signal for longitudinal waves, the data signal for lateral waves, the integrated signal, the decoded signal, and/or the corrected signal.

14. Apparatus for controlling biological systems with an apparatus for generating scalar electromagnetic fields in response to a data signal.

15. Apparatus according to the previous claim with an apparatus for transferring a recorded signal to the apparatus for generating scalar fields.

16. Apparatus according to one of the two previous claims with an apparatus for capturing biological information in cells and organisms according to one of the claims 1 to 13.

17. Apparatus according to one of the three previous claims whereby the apparatus for generating scalar fields can be any technical emitter of electromagnetic waves.

18. Apparatus according to one of the four previous claims whereby the apparatus for generating scalar fields is a multiple Klein coil.

19. Apparatus according to claim 18 whereby the multiple Klein coil contains:

windings of a first electrical wire and windings of at least one more electrical wire whereby the electrical wires are connected with each other at their respective ends as functionally appropriate, and whereby the individual windings of the first wire and the windings of at least one more wire begin at starting points which are shifted against each other along the circumference of the coil body, and whereby each wire crosses under itself after about one rotation at a redirection point and crosses over the other neighboring wires along the axis of the coil before it is wrapped around the coil body again, so that the windings of different wires alternate along the axis of the coil body in a predetermined sequence.

20. Apparatus according to the previous claim whereby a first electrical wire and a second electrical wire as an additional electrical conductor are wrapped around the coil body and whereby both electrical wires are electrically connected with each other at one end of the coil.

21. Apparatus according to one of the claims 19 and 20 whereby the direction of the winding of at least one electrical wire is reversed at least once along the axis of the coil.

22. Apparatus according to the previous claim whereby the direction of the winding is reversed at a redirection point.

23. Apparatus according to one of the claims 19 to 22 whereby the redirection points of the first electrical wire are shifted along the circumference of the coil by approximately 180 degrees against the additional electrical wire.

24. Apparatus according to one of the claims 19 to 23 whereby the redirection points of the first wire and/or of the additional wire form a straight line along the axis of the coil.

25. Apparatus according to one of the claims 19 to 24 whereby the redirection points of the first wire and/or of the additional wire form a zigzag line along the axis of the coil.

26. Apparatus according to the previous claim whereby the redirection points of the first and/or of the additional wire are placed along the axis in a V-shape.

27. Apparatus according to one of the claims 25 and 26 whereby the direction of the windings of the redirected wire is reversed at the points at which the redirection points intersect in an angle.

28. Apparatus according to one of the previous claims with a cylindrical coil.

29. Method for capturing biological information in cells and organisms whereby the electromagnetic longitudinal waves from the cells and organisms are captured and a data signal is generated from the captured electromagnetic longitudinal waves.

30. Method according to the previous claim whereby the electromagnetic longitudinal waves are captured by means of a single conductor which is connected with a p-n transition.

31. Method according to one of the two previous claims whereby the electromagnetic lateral waves from the cells and organisms are captured and used to generate a data signal for lateral waves.

32. Method according to the previous claim whereby the electromagnetic lateral waves are captured by means of a coil.

33. Method according to one of the claims 29 to 32 whereby an integrated signal is generated based on the data signal for longitudinal waves and/or the data signal for lateral waves.

34. Method according to one of the claims 29 to 33 whereby a decoded signal is generated based on the data signal for longitudinal waves, the data signal for lateral waves, and/or the integrated signals.

35. Method according to the previous claim whereby the decoded signal is corrected and a corrected signal is generated.

36. Method according to one of the claims 29 to 35 whereby the data signal for longitudinal waves, the data signal for lateral waves, the integrated signal, the decoded signal, and/or the corrected signal are recorded and stored.

37. Method for controlling biological systems whereby scalar electromagnetic fields are generated in response to a data signal and then passed on to the biological system.

38. Method according the previous claim whereby the data signal is generated by a method according to claims 29 to 36.

39. Method according to one of the two previous claims whereby the scalar electromagnetic fields are generated by using any kind of technical emitter for electromagnetic waves and/or a multiple Klein coil.

40. Application of an apparatus for capturing, according to the claims 1 to 13, of a method for capturing, according to the claims 29 to 36, of an apparatus for controlling biological events, according to the claims 14 to 28, or a method for controlling biological events, according to the claims 37 to 39, with the purpose of intervening in biological processes, eliminating and correcting harmful cell conditions, reduplicating cells and organisms as well as manipulating the genetic material of an organism.

Summary

The presented invention concerns an apparatus and a method for capturing biological information and for controlling biological systems. Such apparatuses and methods can be used for the intervention in biological processes, for the elimination of harmful cell conditions, for the reduplication of cells and organisms and for the manipulation of the genetic material of an organism. The apparatus according to the invention is equipped with a sensor (6) for electromagnetic longitudinal waves which generates a data signal for longitudinal waves.

Fig.1

Fig.2

09/831613

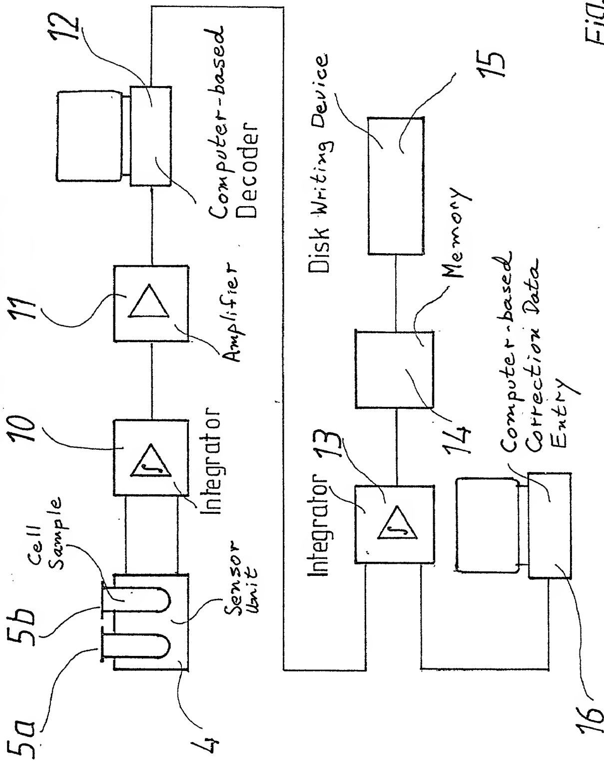


Fig. 3

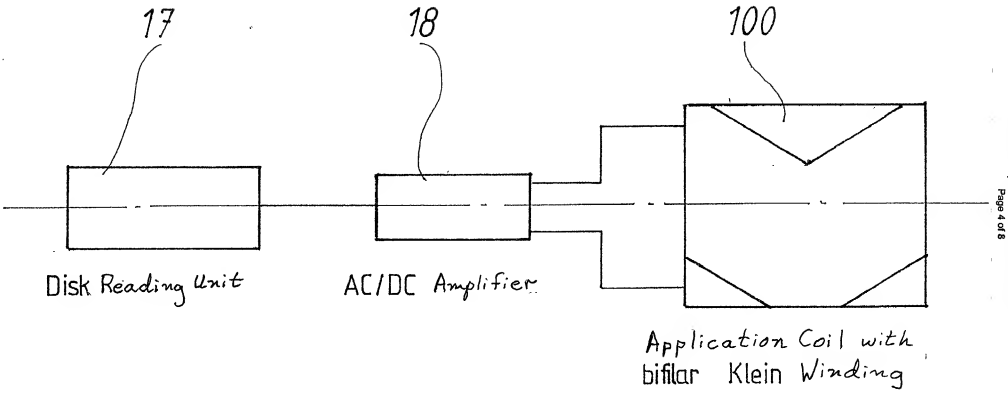
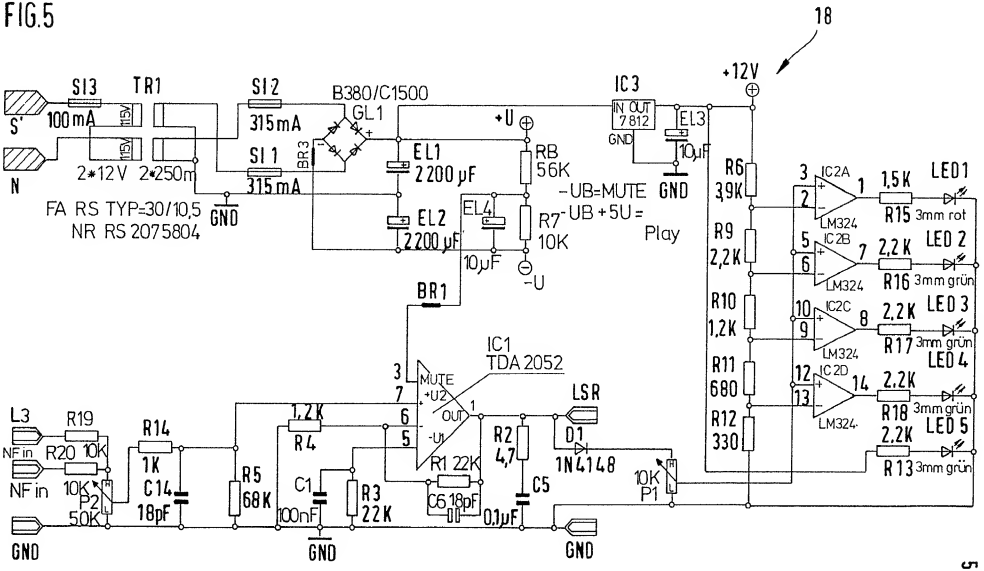


Fig.4

FIG.5



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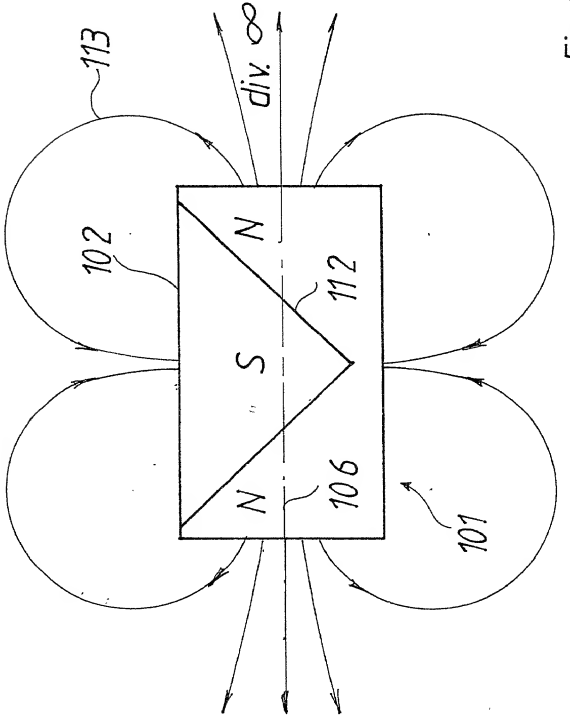

Fig.6

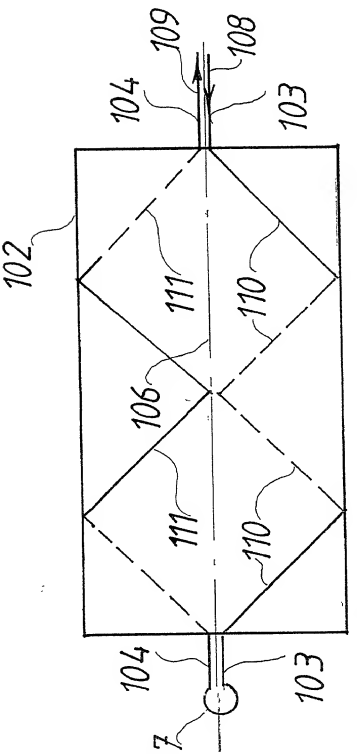

Fig. 7

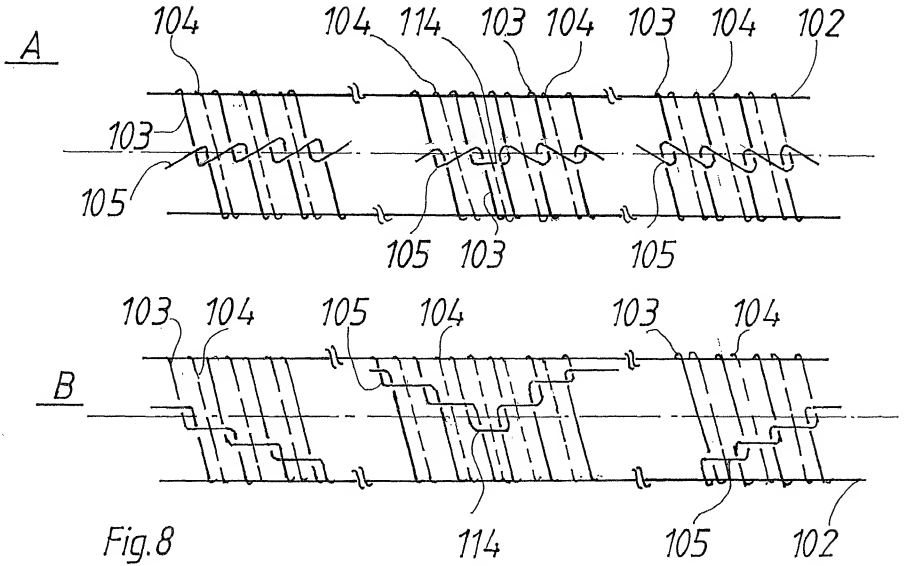

Fig.8

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DECLARATION

☐ Declaration Submitted With Initial Filing OR ☐ Declaration Submitted after Initial Filing

Attorney Docket Number	11004/003
First Named Inventor	Dietrich Reichwein
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

As below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

APPARATUS AND METHOD FOR ACQUIRING BIOLOGICAL INFORMATION AND FOR CONTROLLING BIOLOGICAL SYSTEMS

(Title of the Invention)

the specification of which
☒ is attached hereto
OR
☐ was filed on (MM/DD/YYYY) [ ] as United States Application Number or PCT International Application Number

[ ] and was amended on (MM/DD/YYYY) [ ] (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations, § 1.56

I hereby claim foreign priority benefits under Title 35, United States Code § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Copy Attached? YES	Copy Attached? NO
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority sheet attached hereto:

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below

Application Number(s)	Filing Date (MM/DD/YYYY)	
		☐ Additional provisional application numbers are listed on a supplemental priority sheet attached hereto.

DECLARATION

Page 2

I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)
	PCT/EP00/10145	10/16/2000	

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority sheet attached hereto.

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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(2) over

DECLARATION

ADDITIONAL INVENTOR(S)
Supplemental Sheet

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Applicant Authority							

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City		State		ZIP		Country	
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City		State		ZIP		Country	
Applicant Authority							

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Inventor's Signature						Date	
RESIDENCE: City		State		Country		Citizenship	
POST OFFICE ADDRESS							
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Applicant Authority							

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